Name: _____ TP: _____

FORM A

HW#49: Preview SSS
Geometry
Due Date: Wednesday, December 11th, 2013

Failure to show work on all problems or use complete sentences will result in a LaSalle.

Watch the following video in full to answer the following questions: http://tinyurl.com/GEOMCP49

1) What three actions can be performed to determine whether or not shapes are congruent?

2) If two triangles are congruent, what do we know about their corresponding sides and angles?

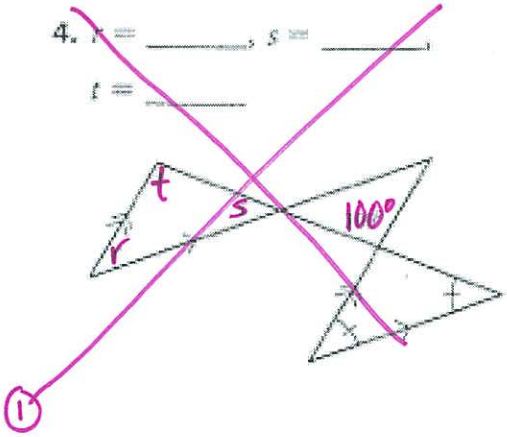
3) If you know that triangles ABC and XYZ are congruent, list all congruent angles.

4) What is the definition of an Axiom and Postulate?

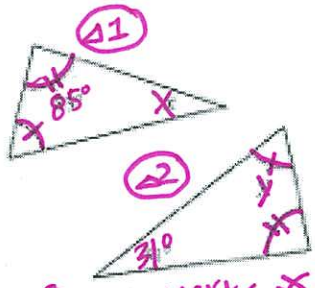
5) What does SSS stand for?

Determine the measure of the angles below. YOU MUST SHOW YOUR WORK! State the postulate /theorem /property you used to find the angles. For example, alternate interior angles. SHOW the math!

4. r = _____, s = _____, t = _____



5. X = _____, Y = _____

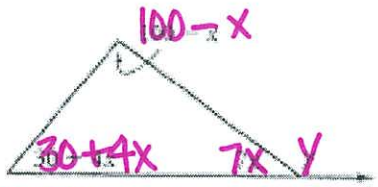


① TWO marks ≠ are ≅! Label.

② ∠2 has only 1 missing angle now. All △s sum to ___ degrees. Label Y.

③ Math the corresponding angles in ∠1.

6. y = _____



① All of the INTERIOR angles sum to ___ degrees. Set up an equation! Solve for X.

Plug x in from step 1!

② 7x + y = ___ (supplementary)

STAY READY.

7. $s =$ _____

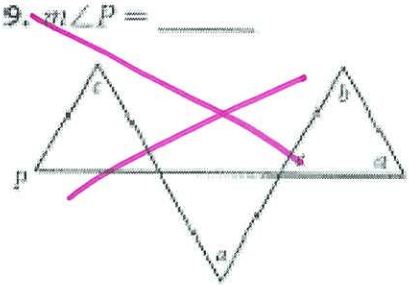
① Label the ≅ angle.
② Set up an equation. All triangles sum to 180°.

8. $m =$ _____

2m because the angles are ≅

$35 + 2m = 180$

9. $m\angle p =$ _____



You should approach each problem as an exploration. Problem-solving requires persistence as much as it requires ingenuity. When you get stuck, or solve a problem incorrectly, back up and start over. Keep in mind that you're probably not the only one who is stuck, and that may even include your teacher. **If you have taken the time to think about a problem, you should bring to class a written record of your efforts, not just a blank space in your notebook**. The methods that you use to solve a problem, the corrections that you make in your approach, the means by which you test the validity of your solutions, and your ability to communicate ideas are just as important as getting the correct answer.

Remember that you can always use old notes, a dictionary, math textbook, and/or look up topics online!

1) On a map's coordinate grid, Merryville is located at (12, 4) and Sillytown is located at (52, 81). Bluxberg is the midpoint between Merryville and Sillytown. What is the distance from Merryville to Bluxberg?

M(12, 4) S(52, 81)
x_1 y_1 x_2 y_2

① Find the distance from M → S.

② Bluxberg is the midpoint (HALF WAY) between the two cities. So, divide by 2.

2) Taniya just got her Multi-Cultural Lit and Algebra Tests back. She got 70% of 30 questions correct on her Multi-Cultural Lit Test, and 90% of 20 questions correct on her Algebra Test. On which test did she get more questions correct?

MCL
70% of 30 questions

① change % to decimal
② "of" means multiply
③ Which test did Taniya do better on?

A
90% of 20 questions

STAY READY.